

DESCRIPTIONS OF NEW SPECIES OF *CALLISTEMON*.

By EDWIN CHEEL.

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CALLISTEMON COMBOYNENSIS, n. sp.

Frutex in natura, arbor parva ad 4-5 m. in cultura. Folia 5-8 cm. longa, linearilanceolata, nervo medio prominente, eis transversis minus conspicuis, intra-marginalibus vix manifestis. Flores in spicis 5-9 cm. longis, flos quisque bractea obtusa, spadice, paleacea, caduca, substriata, plus vel minus molle pubescente, plerumque 6-12 mm. longa, florem juvenilem duplo interdum excedente, subtensus. Calycis tubus viridis, glaber, dentibus perbrevis fuscis. Petala pallidi-viridia, orbicularia, diam. 3 mm., margine leve ciliata. Filamenta 2-4 cm. longa, puniceo-rubra, antheribus purpureo-viridibus. Stylus stamina aequans, stigma globosa. Capsulae triloculares, maturitate ca. 5 mm. diam., ad ores leve contractae.

Plant of shrubby habit in nature, forming a small tree up to 4-5 m. in cultivation. Leaves 5-8 cm. long, linear-lanceolate with a prominent central nerve, the lateral transverse nerves less prominent. Intra-marginal nerves not visible except with a lens. Flowers in spikes from 5-9 cm. long, the individual flowers supported by obtuse reddish-brown, chaff-like, fugacious bracts, faintly striated and more or less softly pubescent, usually from 6-12 mm. long or about twice as long as the fully developed buds. Calyx-tube green, glabrous, with very short brown lobes. Petals pale-green, rotund with slightly ciliate margin, 3 mm. diam. Filaments 2-4 cm. long, reddish, with a tinge of crimson, anthers tinged purplish-green. Style as long as the stamens with a globose stigma. Capsules 3-celled, about 5 mm. diameter when fully matured, slightly contracted at the orifice.

This plant somewhat resembles *C. viminalis* Cheel, but is more shrubby when in the juvenile stage and less tall when fully developed; the bark is less corky or papery than that of the two forms of *C. viminalis*. The leaves of *C. comboynensis* in the juvenile stage are silky-hairy, and magenta or rose-pink, the colour disappearing when fully developed and then almost glabrous. The oil-glands are numerous and emit a fragrant essential oil with an odour somewhat like that of all-spice. The plant also differs from the coastal bottlebrush, *C. citrinus* (Curt.) Domin (Syn. *C. lanceolatus* (Sm.) Sweet) in the peculiar habit of the first flush of rose-pink young leaves in spring (August-October) not having flowering spikes. In December the terminal spikes of flowers enclosed in reddish-brown-coloured bracts are produced which, when expanded, develop the infra-terminal young growth of rose-pink-coloured leaves and twigs. The flowering season from December to May has been noted for several years in contrast to that of *C. citrinus* which is usually from September to November.

Type: Comboyne Ranges in crevices of rocks. E. Cheel, December, 1926.

At first sight this species might easily pass as a form of *C. citrinus* and, indeed, was classified as such by Chisholm (1925). During December, 1926, when visiting Lansdowne, I collected specimens with mature capsules and seeds, from which I was successful in raising seedlings. Two of these in cultivation at Ashfield and the Botanic Gardens, Sydney, have been kept under close observation with the result that I am now able to furnish the above description.

CALLISTEMON HORTENSIS, n. sp.

Frutex coartatus, 1-2.6 m. altus, ramulis gracilibus. Germina infraterminalia juvenilia foliaque primum sericeo-tomentosa, roseo-punicea tineta fusca, maturitate paulatim pallescentia in colorem flaviviridem. Folia cum punctis oleiferis multis anguste

lanceolata apice acuminato, 1.5-5 cm. longa, 2-5 mm. lata, nervo medio prominente, eis intra-marginalibus minus conspicuis, lateralibus obliquis vix manifestis. Spicae floriferentes primum in bracteis marginale plus vel minus ciliatis multis fusco-paleaceis pallidescensibus inclusae. Rachis calycis tuboque pubescentes. Sepala scariosa fuscuscula, margine plus vel minus ciliata. Petala viridiuscula, glabra sed margine paulo ciliata, glandibus evidentibus. Filamenta 1.5-2 cm. longa, rubra acetate syringi-rosescentia, anthera nigriora quam filamenta. Stylus duplo stamina excedens. Stigma globosa. Fructus maturitate, i.e., post anthesem 2.5-3 annis, globosi, ca. 5 mm. diam., ad ores contracti.

Plant of a compact shrubby habit, 1-2.5 m. high, branches slender. Juvenile infra-terminal shoots and leaves at first silky-tomentose, of a rosy-pink colour tinged with brown, which gradually disappears as the chlorophyll develops and finally becomes yellowish-green when the leaves are fully matured. Leaves narrow-lanceolate, 1.5-5 cm. long, 2-5 mm. broad, central vein prominent, terminating in a sharp point, intra-marginal veins rather obscure, lateral veins oblique, scarcely visible to the naked eye, oil-glands numerous. Flowering spikes at first enclosed by numerous brownish, straw-coloured bracts, which, with age, turn to a pale brownish tinge, and are finally forced off as the individual flowers develop. Rachis, together with the calyx-tube of the flowers, silky-pubescent. Sepals scarios, brownish-coloured, more or less ciliate at the margin. Petals greenish, glabrous except the margin, which is slightly ciliate; oil-glands plainly visible. Filaments 1.5-2 cm. long, garnet coloured, tending to lilac-rose with age, anthers darker than the filaments. Style nearly twice as long as the stamens. Stigma globose. Fruits, when fully matured (about two and a half to three years from the flowering period) globose, about 5 mm. diam., contracted at the orifice.

The original plants were raised from seeds received from Berlin, Germany, in 1913, labelled *Callistemon amoenus* Lemaire, and were sown in May of that year. Several plants were distributed but the only plant that survived was one planted at Ashfield, which flowered in October, 1917. The flowers were compared with Dauthenay's (1905) colour chart and matched that given as purple-garnet, Pl. 165 (4). Successive flowering spikes were compared which varied from a reddish-purple to purple-garnet (see also Dauthenay (loc. cit.), Pl. 161 (2)). In comparing the fruiting specimens which matured in November, 1921, together with the flowering specimens with the fine series of specimens in the National Herbarium, there is no species to match it. It is quite distinct in colour from *C. amoenus* figured by Lemaire (1860). So far as is known this plant does not occur in the wild state, and it is possible that it is of hybrid origin.

CALLISTEMON ROSEUS (Guilfoyle) stat. nov.

Syn. *C. salignus* DC. var. *roseus* Guilfoyle. "Swamp or River-bank Bottlebrush."

Maiden (1911, p. 66) made reference under *C. paludosus* F. Muell. to certain specimens from Lobb's Hole, Tumut district, collected by Mr. W. Forsyth, having light pink stamens. Reference was also made (loc. cit.) to a similar plant in the Melbourne Botanic Gardens, flowering in February, 1908, with spikes of creamy-rose or blush-reddish-coloured flowers, and labelled *C. salignus* var. *roseus*.

Since the above remarks were published, I have had ample opportunity of studying seedlings raised from seeds of the Lobb's Hole plants, here attributed to *C. roseus*, and of comparing them with plants of *C. salignus* in cultivation. These two species and *C. paludosus* are easily distinguished when seen in cultivation, although Bentham (1866) regarded *C. paludosus* as a variety (var. *australis*) of *C. salignus* and Guilfoyle (1909) named his plant similarly as a variety of that species. After many years of observation, I find that seedlings of *C. roseus* develop the same characteristics of the parent plants as follows: Leaves comparatively thick, pungent-pointed, silky hairy, especially in the juvenile stage, lateral veins somewhat obscure. Filaments creamy-white to rose-pink. Venation less prominent and oil glands of the leaf fewer than in *C. paludosus*. *C. roseus* is most easily distinguished from *C. paludosus* F. Muell. by the silky hairy juvenile foliage and the rose pink filaments. The epithet was published as *rosens* in Guilfoyle (1909) but corrected here as an obvious typographical error, both from the construction and from the label in Melbourne Botanic Gardens with which Guilfoyle was associated.

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